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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/868,289  | 07/10/2001  | Didier Arnoux        | 264/264             | 7287             |
| 21890   | 7590        | 02/17/2004           | EXAMINER            |                  |
| PROSKAUER ROSE LLP<br>PATENT DEPARTMENT<br>1585 BROADWAY<br>NEW YORK, NY 10036-8299 |             |                      | SERGENT, RABON A    |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1711                |                  |

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/868,289

Applicant(s)

ARNOUX ET AL.

Examiner

Rabon Sergeant

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 20-23, 27, 29, 33-36, 39, 41-43, 45, and 49 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 6-16767.

The reference discloses a polyurethane composition comprising the reaction of a prepolymer, derived from toluene diisocyanate and polytetramethylene glycol, with DETDA, in the presence of phthalate or phosphate plasticizers, such as dioctyl phthalate, octyldiphenyl phosphate, and triphenyl phosphate. The reference further discloses that the reaction proceeds at temperatures as low as 30°C. See pages 1-5 and 7 of the translation.

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3. Firstly, applicants have argued that the amendments to claims 20 and 42 have excluded the disclosed octyldiphenyl phosphate plasticizer. In response, it is not clear that the amendments have excluded the disclosed compound, because octyldiphenyl phosphate is considered to at least encompass ethylhexyldiphenyl phosphate, and the position is further taken that ethylhexyldiphenyl phosphate meets the claims as amended. To support this position, the examiner refers applicants to page 493 of Sax et al., wherein it is disclosed that the octyl radical encompasses the 2-ethylhexyl radical. Alternatively, if not anticipated, the position is taken that it would have been obvious to substitute one isomeric diphenyl phosphate plasticizer for another, given that one would have expected the isomeric plasticizers to function as equivalents. It is noted that this issue is not relevant to claims 33-36, 39, 41, 43, and 49.

4. Secondly, applicants have argued that the amendment to claim 33, requiring that the process be performed at room temperature, distinguishes the claims from the prior art, because the prior art discloses that the reactants are heated. In response, though applicants have amended the claim to recite "room temperature", the position is taken that since the instant specification essentially sets forth "room temperature" and temperatures of 15 to 35°C as being equivalent, the skilled artisan would interpret the claimed "room temperature" limitation as being any temperature that falls within the 15 to 35°C range. Accordingly, the instant temperature and prior art temperature continue to overlap. Alternatively, if not anticipated, the position is taken that the respective temperatures are close enough that one would have expected the respective processes and products to have equivalent characteristics. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Furthermore, it is argued that it would have

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been obvious to reduce the processing temperature for a casting process, since the rapid reaction rate associated with the elevated temperatures of a RIM process would be unnecessary and unwelcome.

5. Claims 20-32, 37, 38, 40, 44, and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 6-16767, in view of Singh et al. ('371) and further in view of Rizk et al. ('860), Peter ('258), and Gabbard et al. ('956).

As aforementioned within paragraph 2, the primary reference discloses the production of polyurethanes, wherein a prepolymer, derived from toluene diisocyanate and polytetramethylene glycol, is reacted with a hindered aromatic diamine, in the presence of phthalate or phosphate plasticizers, such as dioctyl phthalate, octyldiphenyl phosphate, and triphenyl phosphate. The reference further discloses that the reaction proceeds at temperatures as low as 30°C. See pages 1-5 and 7 of the translation. See paragraph 4 of this Office action for remarks concerning the instant and disclosed processing temperatures.

6. The primary references are silent with respect to the dimethylthiotoluene diamine curing agent and specific plasticizers, such as isodecyl diphenyl phosphate, butyl benzyl phthalate, and tributoxyethyl phosphate; however, these components were known constituents of polyurethanes at the time of invention. Dimethylthiotoluene diamine was a known hindered diamine for curing toluene diisocyanate based prepolymers. See column 3, lines 61+ within Singh et al. Plasticizers corresponding to those claimed are disclosed within Gabbard et al. at column 4, Peter at column 2, lines 47-52, and Rizk et al. at column 6. The position is taken that it would have been obvious to incorporate the curing agent and plasticizers of the secondary references within the compositions of the primary reference, because it has been held that it is *prima facie* obvious to utilize a known component for its known function. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.

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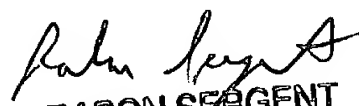
7. The examiner has considered applicants' arguments; however, the position is maintained that the examiner has set forth a *prima facie* case of obviousness, and applicants have failed to rebut the *prima facie* case of obviousness by such means as a showing of unexpected results, relative to the plasticizers set forth within the primary reference and commensurate in scope with the claims.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergeant at telephone number (571) 272-1079.

R. Sergeant  
February 8, 2004

  
RABON SERGENT  
PRIMARY EXAMINER